

INNOVATING TOMORROW,

TODAY!

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About Us

Continuing to pioneer advancements in automation and engineering

ManTech Systems & Solutions focuses on delivering innovative solutions to various industries, leveraging advanced technologies to pioneer new frontiers. Founded in early 2017 in Johannesburg, South Africa, ManTech Systems has rapidly become a leader in comprehensive industrial automation services. With extensive experience both locally and internationally, ManTech Systems has successfully executed projects in various countries, including Ivory Coast, Ghana, Algeria, Togo, Italy, Germany, and Saudi Arabia, demonstrating its global reach and expertise.

Our capabilities are exclusively related to industrial and automation solutions. We specialise in providing advanced automation systems, industrial controls, and process optimisation solutions that give our clients a significant competitive advantage.

By integrating cutting-edge technologies and innovative solutions, we assist our clients in enhancing their operational efficiency, productivity, and overall performance.

Our tailored solutions are designed to meet the unique needs of each client, enabling them to perform their processes better and more efficiently than their competitors.

Inspiration for Innovation

Our corporate concept embodies the innovative and resilient spirit of ManTech Systems, a legacy that drives us forward and inspires our future.

CORE VALUES

Commitment

We see issues through to their completion. We know that yesterday's successes will not last forever, so we grow and learn to succeed again.

Creativity

We have the freedom to imagine and the courage to act.

Excellence

We relentlessly pursue continuous improvement and excellence in our projects, products, processes, and services, defining success as getting the right things done well.

Passion

We believe that passion for what we do is the key driver of knowledge. Moreover, knowledge nurtures imagination and creativity, which are the seeds of our company.

Innovation

We consider changing a natural means of achieving added value. Therefore, we continually seek new knowledge, share our knowledge and experience, and encourage employee and customer mobility.



Core competences

Driving Innovation and Excellence

Comprehensive Service Offerings

At ManTech Systems, we prioritise product knowledge as the most important skill. We believe that a deep understanding of our products is crucial for providing exceptional service and innovative solutions.

This commitment to expertise sets us apart in the industry and ensures that our clients receive the best possible support. To maintain this high level of proficiency, we make it a priority for our entire team to stay up-to-date with the latest technology from our partners. This continuous learning process allows us to leverage cutting-edge advancements and integrate them seamlessly into our offerings.

Our dedication to staying current with technological developments reflects our commitment to excellence. By keeping our team well-informed and skilled, we can deliver solutions that are truly world-class.

Our clients can trust that they are receiving the most advanced and effective technologies available, tailored to meet their specific needs. At ManTech Systems, our focus on product knowledge and staying ahead of technological trends ensures that we remain a leader in the industry.

Customer Centric

Positioning a customer-first, quality-first approach as the foundation of our business, we continue to respond to the trust of our customers through a production system incorporating state-of-the-art facilities, a global network that spans the entire world, reliable technologies that anticipate next-generation advances, and new proposals based on our expansive knowledge.

Uniqueness

Industrial automation, mechanical and electrical systems bring complex challenges in their wake. These challenges demand systems thinking and structured working methods to provide the most efficient, economic and robust solutions. We have the holistic perspective and expertise required to address these complex challenges in the market. Being a certified system integrator company, and having skilled and knowledgeable workmanship, our clients are always guaranteed to receive outstanding service. We are a company that sets new standards and benchmarks them.

Advanced Automation Solutions

Designing and implementing sophisticated automation systems tailored to enhance operational efficiency and productivity across various industries.

Precision Engineering

Expertise in precision manufacturing and engineering, including micron-level processing, ensuring high accuracy and reliability in component production.

Industry-Specific Expertise

Deep knowledge and experience across diverse industries including manufacturing, energy, mining, and more, enabling targeted solutions that address industry-specific challenges and requirement.





Business field

Championing Excellence Across Diverse Industries and Beyond

ManTech Systems operates across diverse industries, providing specialised services that cater to a wide array of fields including manufacturing, mining, energy, water, and construction. Our extensive experience in these sectors allows us to understand and meet the unique challenges and requirements of each industry we serve.

Under Ground

Processing, and Be

Whether it's enhancing operational efficiency in manufacturing through advanced automation solutions, optimising resource management in mining with cutting-edge technologies like AI and big data, or ensuring reliable infrastructure in the energy and water sectors through robust mechanical and electrical systems, ManTech Systems is committed to delivering tailored solutions that drive success.

Our dedication to excellence and innovation has been pivotal in our journey. It fuels our continuous pursuit of new opportunities and the exploration of innovative technologies that can transform industries. By staying at the forefront of technological advancements and industry trends, we not only meet current demands but also anticipate future needs, positioning our clients for sustained growth and competitiveness.

Efficiency Redefined:

Collaborating to automate your industrial processes





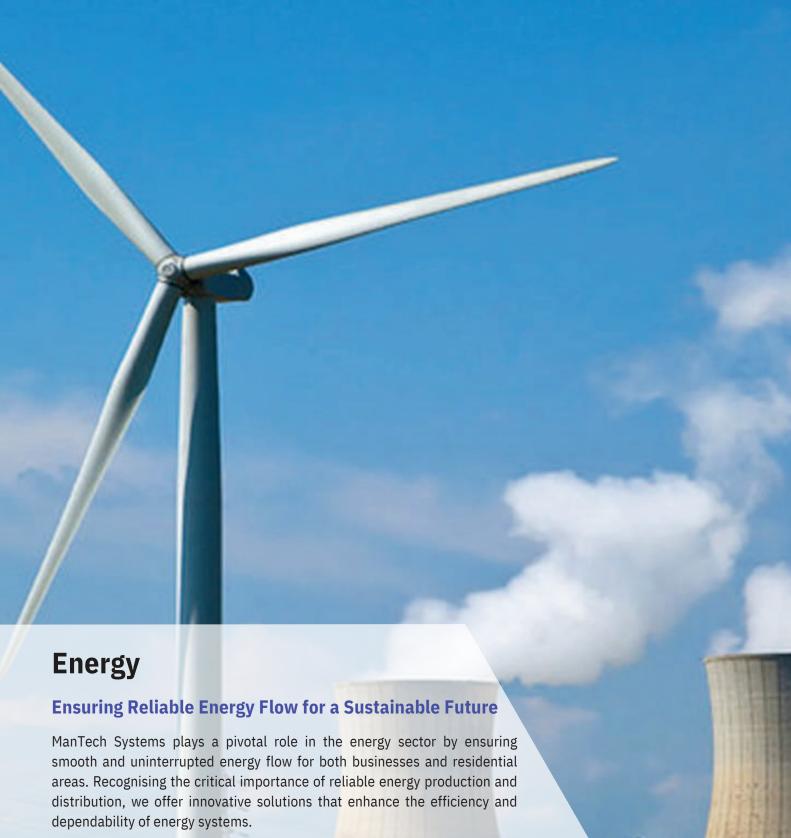




ManTech Systems is dedicated to advancing technology to provide solutions that make mining operations more efficient, safer, and environmentally friendly.

Our innovations include automation and remote monitoring, which enhance productivity and reduce operational costs. Additionally, we utilise big data and AI to improve resource discovery and management, leading to more precise and efficient extraction processes.

Targeted Areas: Under Ground Mining, Refineries, Concentrators, Processing, and Beyond. **Challenges:** Productivity, Energy Efficiency, Real-Time Monitoring, Optimisation, and Reporting. **Solutions:** Software Development, SCADA System, HMI Solutions, MES and OEE, Dashboard, Servo System, Switch Boards, and Maintenance.



Our expertise helps energy providers optimise their operations and address challenges in energy flow and distribution. By implementing advanced automation, integrating renewable energy sources, and employing smart grid technologies, we support a seamless energy supply. Our commitment to reliability and sustainability ensures that energy demands are met effectively, minimising downtime and fostering

a stable energy infrastructure for all sectors.

Targeted Areas: Power Generation, Distribution Network, Renewable Energy, Generators, and Beyond.

Challenges: Energy Efficiency, Real-Time Monitoring, Optimisation, and Reporting. **Solutions:** Software Development, SCADA System, HMI Solutions, MES and OEE, Dashboard,

Servo System, Switch Boards, and Maintenance.







Solution S

Make your life easier with us!

ISA-95 Architecture

Level 4: Business & Logistics

Management Level - ERP, CRM, etc

Level 3: Manufacturing Operation Planning

Planning Level - MES

Level 2: Monitoring & Supervising

Supervisory Level - SCADA, HMI

Level 1: Sensing & Manipulating the Production Process

Control Level - PLCs

Level 0: Physical Production Process

Field Level - Machinery, Sensors, etc

Our services seamlessly integrate with the ISA-95 industrial automation standard, ensuring optimal efficiency, streamlined operations, and unparalleled scalability. Our expertise bridges the gap between the enterprise and control systems, delivering tailored solutions that empower your business to thrive in the digital age.

Our Services

Software Engineering

We understand the pivotal role software plays in modern industrial automation. Our software engineering services are meticulously designed to empower manufacturing and mining sectors with cutting-edge automation solutions. From PLC programming to MES implementation, our team leverages decades of expertise to streamline processes, boost efficiency, and drive productivity.

Partnering with industry-leading OEMs, we deliver unparalleled software solutions that drive tangible results. At ManTech Systems, we are not just engineers; we are your trusted partners in digital transformation.

PLC Programming

Our skilled engineers meticulously analyse operational requirements to develop customised PLC programs that automate crucial processes. Prioritising precision and reliability, we seamlessly integrate these solutions to optimise performance, empowering our clients' systems to achieve peak efficiency.

HMI Design and Development

In industrial automation, front-end usability is crucial. Our HMI designs blend functionality with user-friendly interfaces, enabling seamless interaction between operators and machines. From user-centric design principles to intuitive controls, we prioritise usability to boost productivity across factory operations.

SCADA Design and Development

SCADA are the pillars of modern industrial control systems. At ManTech Systems, we design robust SCADA systems tailored to your unique requirements. Real time monitoring, remote access, and predictive analytics empower you to make informed decisions and optimise operations.





MES & OEE Implementation

We specialise in deploying industry-leading MES solutions that provide real time visibility and control over your production processes, ensuring improved efficiency, quality, and compliance. Our OEE implementation focuses on maximising equipment productivity by identifying and addressing performance bottlenecks, downtime, and quality issues.

Dashboard and Reporting

Data is the lifeblood of effective decision-making. Our manufacturing business intelligence solutions transform raw data into actionable insights. Dynamic dashboards and comprehensive reporting tools provide invaluable visibility into your operations, enabling strategic optimisation and continuous improvement initiatives.

In today's rapidly evolving industries, the role of advanced software engineering cannot be overstated. It is the cornerstone of innovation, driving efficiencies and unlocking new possibilities across every sector. At ManTech Systems, we harness this power to redefine what's possible, empowering businesses to lead with agility and precision in a dynamic global marketplace.

We understand that each industry has unique challenges, and our comprehensive approach to software engineering is designed to meet those challenges head-on, enabling our clients to achieve excellence in performance and deliver exceptional results.

Electrical, Control & Instrumentation, Installation & Commissioning

System Integration

Unlocking Efficiency Through Seamless System Integration



Electrical LV System Design & Installation

Powering Your Operations with Precision LV System Solutions



Precision in Every Panel: Reliable Instrumentation for Optimal Performance.

Harmonising Your Automation Landscape for Enhanced Performance

Seamlessly integrating disparate automation systems is our forte. Our experienced engineers meticulously orchestrate the integration process, ensuring interoperability, efficiency, and scalability across your entire infrastructure.



Energising Automation: Safe, Reliable, and Efficient LV System

From concept to completion, we design and install LV electrical systems that form the backbone of industrial automation. Safety, reliability, and efficiency are key as we engineer solutions tailored to your specific needs.



Precise instrumentation is crucial for accurate control and measurement in industrial processes. Our expert team designs, installs, and commissions instrumentation panels with meticulous attention to detail, ensuring optimal performance and reliability.





Motor Control Center (MCC) Panel Design, Manufacturing, and Installation

Empowering Operations: Precision-Engineered MCC Panels for Enhanced Safety and Efficiency



Precision VSD Installation and Programming for Optimal Motor Control.

Servo Motor and Servo Drive Installation

Empower Your Systems:
Seamless Motion Control with
Expert Servo Motor and Drive
Solutions

Mastering Motor Control: Tailored MCC Solutions for Optimal Performance

As the heart of your electrical distribution system, MCC panels demand expert design and precision engineering. At ManTech Systems, we deliver customised MCC solutions that optimise motor control, enhance safety, and streamline operations.

Expert VSD Solutions for Precise Speed Control and Enhanced Performance

Variable Speed Drives are indispensable for energy-efficient motor control. Our skilled technicians handle the installation and programming of VSDs with precision, enabling precise speed control and energy savings across your operations.

Superior Servo Motor and Drive Installations for Unmatched Performance

For applications requiring precision motion control, our servo motor and drive installations deliver unmatched performance and reliability. From robotics to CNC machines, we empower our clients' systems with seamless motion control capabilities.







Commissioning and Decommissioning of Machinery and Process Plant

Smooth Starts and Safe Shutdowns: Expert Management for Your Machinery and Process Plant



Breakdown and Maintenance

Stay Operational: Expert Maintenance to Prevent Downtime and Boost Productivity

From Setup to Shutdown: Ensuring Efficiency and Safety Every Step of the Way

Whether commissioning new equipment or decommissioning outdated machinery, our expert team ensures a smooth transition with minimal disruption to your operations. Rigorous testing and meticulous planning guarantee optimal performance and safety at every stage.



Efficient Repairs, Uninterrupted Production: Your Partner in Quick Fixes and Maintenance

Downtime is costly. Our responsive breakdown and maintenance services ensure rapid resolution of issues, keeping your operations running smoothly and minimising production losses.



Retrofit and Upgrades

Future-Proof Your Systems: Tailored Solutions for Enhanced Efficiency and Performance

Revamp Your Systems: Bespoke Solutions for Improved Efficiency

Embrace the future of automation with our retrofit and upgrade solutions. From legacy systems to cuttingedge technology, we breathe new life into your infrastructure, unlocking enhanced capabilities, efficiency, and performance.



Mechanical Work

We are dedicated to crafting seamless motion solutions through our expertise in fluid dynamics and mechanical innovation. Specialising in the design, installation, and troubleshooting of pneumatic and hydraulic systems, as well as offering machinery alignment and mechanical design services, we epitomise engineering excellence in every aspect of our work.



Project Management and Turnkey Solutions

We specialise in delivering comprehensive Project Management and Turnkey Solutions tailored to the unique needs of our clients. With a commitment to excellence and a proven track record of success, we offer a seamless and efficient approach to project execution, ensuring timely delivery and exceptional results.

Service Level Agreements

We offer our clients comprehensive service-level agreements (SLAs) for maintenance contracts covering machinery, software systems, repairs, and upgrades. In the realm of service provision, commitment is not just a promise; it forms the bedrock of trust and reliability. We redefine conventional SLAs, presenting a unique approach where each commitment reflects our dedication to excellence, transforming SLAs into blueprints for unparalleled service quality.



Sourcing

We take pride in offering premium sourcing services for parts and automation components sourced directly from major OEMs. With our extensive network and industry expertise, we provide a reliable and efficient solution for all your sourcing needs, ensuring high-quality products and timely delivery.

Our Projects



YASKAWA

To envision what ManTech Systems can accomplish for your business, have a look at some of the successful projects we have had with our clients.

Ling sing tomorrow

ABB PROT

HYDRAULIC PRESSURE PLANT- Design, installation, and commissioning of hydraulic pump house for tower testing, high-pressure pumps of maximum 700 bar driven by 75kW motors, control with Mitsubishi PLC and ABB drives. Introduction of remote control of pumps using IoT system, better monitoring of the instruments. Client: Eskom Rosherville

DESIGN AND COMMISSIONING- Design of control panel, install and program of smart control system for the gas filling system at Sasol Secunda plant, using Delta PLC and HMI. Implementing remote control system for monitoring of the plant and early detection of malfunction and easy troubleshooting remotely. Client: Airliquid

DESIGN AND COMMISSIONING- Design, supply, installation, and commissioning of MCC of the entire plant, PLC programing and SCADA design and implementation for plant. **Client: Upward Spiral (Gold Mining)**

DISTRIBUTION PANEL- Design, manufacture, install and commissioning of a complete distribution panel with an incomer of 3200A fed from Transformer Using Mitsubishi Air Circuit breakers. Client: Silicon Smelter (Mining)

YASKAWA

SOME SOURCING



YASKAWA

Eskom: Power transformers, high pressure hydraulic power pack, drives up to 500kW, SF6 Vacuum

circuit breakers, LV and MV switch gears.

Tulisa Cables: Drives, PLC, HMI, Sensors. Air Circuit breakers, LV switch gears. **Alvern Cables:** Drives, PLC, HMI, Sensors. Air Circuit breakers, LV switch gears. **South Ocean:** Drives, PLC, HMI, Sensors. Air Circuit breakers, LV switch gears.



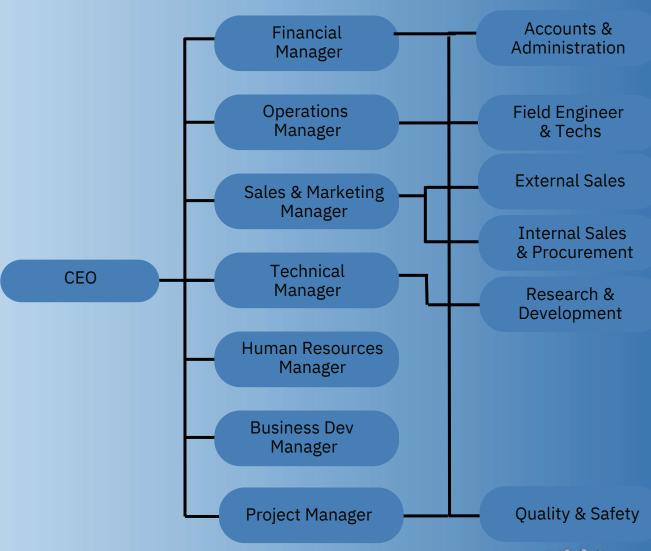
DESIGN AND COMMISSIONING - PLC, HMI and SCADA System design and programming using Allen Bradley PLC, Allen Bradley HMI, Allen Bradley VSD and E300 smart relay. Client: Vusaken Wastewater Treatment Plant

INSTALLATION AND MAINTENANCE-Siemens Teleperm XP distributed control system & field instrumentation (temperature sensors, level & pressure transmitters, analytical instruments, flow meters, actuators.). Client: Eskom Camden Power Station Majuba

DELTA ELECTRONICS INC.

DESIGN AND IMPLEMENTATION- Systems integration of ABB UMC & Mitsubishi PLC on all conveyor belts. **Client: Glencore Mining**

Organisational Chart





Enabling Your Business Evolution

ManTech Systems is built on a foundation of highly skilled professionals and experts in their respective fields, ensuring each department operates with precision and efficiency. From software engineering and electrical control to system integration and project management, our multidisciplinary teams collaborate seamlessly to deliver innovative and tailored solutions.

This structure allows us to harness the diverse talents and expertise of our workforce, driving continuous improvement and excellence in all our projects and services.



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